# QuickNet™ PanMPO™ and MPO Small Diameter Trunk Cable Assemblies



#### technical information

PanMPO™ Trunk Assemblies are pre-terminated 12-fiber and 24-fiber cable assemblies. The unique design of the PanMPO™ Connector allows for rapid gender and polarity change in the field and enables a seamless, standards-compliant cable plant migration from duplex based applications (e.g. 10G Ethernet) to parallel optics based applications (e.g. 40/100G Ethernet). These small diameter trunk cable assemblies optimize cable routing requirements to ensure efficient use of pathway space and significantly reduce installation time and cost. All trunk cable assemblies are factory terminated and tested to deliver verified optical performance and reliability for improved network integrity.



# application

High speed fiber backbone or permanent link when mated to QuickNet™ Cassettes or fiber adapter panels paired with MPO to LC breakout harnesses. Method A and Method B TIA-568-C compliant for 40G/100G parallel optics multimode applications. Allows system designers to tailor configuration, reach and breakout construction to application requirements; to minimize waste, optimize cable management, speed deployment, improve flexibility and manageability for lower installation costs. Small diameter trunk cable assemblies use 30 – 40% less space which is ideal for high cable density applications.

#### construction

Cable type:	Indoor Small	Indoor Small Diameter Trunk	
Cable jacket ratings:		Optical Fiber Non-conductive Plenum (OFNP) Low Smoke Zero Halogen (LSZH)	
Fiber types:	Multimode: Singlemode:	OM3 50/125μm OM4 50/125μm OS2 9/125um	
Connector types end 'A':	PanMPO™ Ma LC duplex (12	PanMPO™ Female PanMPO™ Male LC duplex (12F only) MPO (singlemode)	
Connector types end 'B':	PanMPO™ Ma LC duplex (12	PanMPO™ Female PanMPO™ Male LC duplex (12F only) MPO (singlemode)	
Fiber count:	12 and 24		
Jacket color:	OM3: OM4: OS2:	Aqua Aqua Yellow	

## physical properties

Cable outside diameter (OD):	12-fiber: 24-fiber:	4.5mm 5.4mm
Minimum bend radius:	30mm	
Cable tensile strength:	12-fiber: 24-fiber:	440N 660N
Cable compressive load:	10 N/mm	
Flex:	100 cycles at 4.9N	
Connector cable retention:	50N	
Connector durability:	500 mating cycles*	
Breakout outside diameter:	3.0mm	
Transition outside diameter:	12-fiber: 24-fiber:	10mm 10mm
Pulling eye diameter:	12-fiber: 24-fiber:	19mm 23mm
Twist:	10 cycles at 15N	
Breakout length:	1m	

# optical properties

Maximum cable attenuation:	Multimode:	3.5dB/km at 850nm 1.5dB/km at 1300nm
Maximum connector insertion loss (per mated pair):	Singlemode Standard IL: Mulitmode Optimized IL: Multimode	0.5dB 0.35dB
	Ultra Low IL:	0.25dB
Minimum connector return loss:	Multimode: Singlemode:	OM3 30dB minimum OM4 30dB minimum OS2 50db minimum

<sup>\*</sup>With proper cleaning and inspection

# environmental properties

Operating temperature:	0°C to +70°C
Storage and shipping temperature:	-40°C to +70°C
Installation temperature:	-0°C to +60°C

#### standards

Meets or exceeds:

ISO/IEC 11801, TIA/EIA-568-C.3, TIA-604-5 (FOCIS-5), TIA/EIA-568-C.1, GR-409-CORE, ICEA S-83-596 RoHS Complaint

# QuickNet™ PanMPO™ and MPO Small Diameter Trunk Cable Assemblies

## part number

Example: FXUYL7E7EAAM030 = OM3, 24-fiber, indoor small diameter trunk cable, LSZH, PanMPO™ Female to PanMPO™ Female, polarity A, pulling eye, 30 meters.

**CHARACTER** 8 9 10 12 15 1 2 3 4 5 6 7 11 13 14 F Χ U Р 7 7 Υ 5 5 X F **EXAMPLE** Ν 0 3 0

**1 – Fiber** F = Fiber

2 – Fiber Type

9 = OS2 9/125um X = OM3 50/125μm

 $Z = OM4 50/125 \mu m$ 

3 - Fiber Count

T = 12 fiber U = 24 fiber

4 - Cable Type

Y = Indoor small diameter trunk cable

5 - Jacket Type

L = Low Smoke Zero Halogen (LSZH) P = Plenum (OFNP) 6 - Connector Type (End 'A')

5 = Singlemode MPO Female

6 = Singlemode MPO Male

7 = Multimode PanMPO Female

8 = Multimode PanMPO Male

7 - Connector Variant (End 'A')

5 = 39" Breakout with transition

8 - Connector Type (End 'B')

5 = Singlemode MPO Female 6 = Singlemode MPO Male

7 = Multimode PanMPO Female

7 = Maliinode Fanivii O Femal

8 = Multimode PanMPO Male

L = LC duplex (12F only)

9 - Connector Variant (End 'B')

5 = 39" Breakout with transition

10-Construction/Performance

A = Singlemode Polarity A - Standard IL

X = Multimode Polarity A - Optimized IL

Y = Multimode Polarity B - Optimized IL

K = Multimode Polarity A - Ultra Low IL

L = Polarity B - Ultra

Multimode Polarity B - Ultra Low IL

11 - Other

N = No pulling eye (15 - 100ft, 5 - 30m)

A = Pulling eye end A (>100ft, > 30m)

12 - Unit of Length

F = Feet (OFNP)

M = Meters (LSZH)

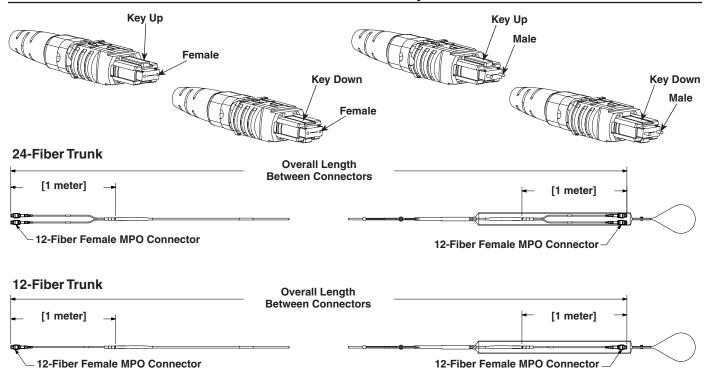
13, 14, 15 - Cable Assembly Length

015 - 300ft 1ft increments to 100ft,

5ft increments to 300ft

005 - 100m, 1m increments

## Small diameter trunk cable assembly detall



Please contact Panduit customer service for information on additional part number options.

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